# Draft Environmental Water Program Briefing Paper No. 10 Coordination between the Environmental Water Program and Related Programs

# Prepared for:

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#### INTRODUCTION

The following memorandum describes how planning and implementation of the Environmental Water Program (EWP) will be coordinated with other related CALFED and non-CALFED water acquisition and management programs.

This coordination is intended to:

- reduce competition between programs and potentially reduce water costs by using water for multiple environmental purposes and meeting several program objectives;
- reduce costs (including those associated with environmental compliance) by eliminating duplicative efforts;
- provide a more cohesive, coordinated, and effective effort to acquire water for environmental purposes; and
- achieve program goals more quickly by pooling staff and funding resources.

This memo describes how coordination between the EWP and seven other water purchase and water management programs will take place. These seven programs are:

- CALFED Environmental Water Account (EWA),
- Central Valley Project Improvement Act (CVPIA) Dedicated CVP Yield Program (Section 3406[b][2]),
- CVPIA Water Acquisition Program (WAP) (Section 3406[b][3]),
- DWR Dry Year Program,
- CALFED Water Use Efficiency (WUE) Program,
- CALFED Storage Program, and
- Sacramento Valley Agreement Integrated Water Management Program (Phase 8).

Following this introduction, this memo describes the purpose and operation of each of these

seven other programs, then will describe how coordination between the EWP and these other programs will occur. Figure 1 presents a geographic comparison of the EWP, EWA, CVPIA Dedicated CVP Yield Program, and CVPIA Water Acquisition Program.

#### ENVIRONMENTAL WATER ACCOUNT

# **Purpose**

The purpose of the EWA is to protect endangered and threatened fish species in the Bay–Delta estuary through environmentally beneficial changes in operations of the State Water Project (SWP) and Central Valley Project (CVP), while ensuring the ability of the SWP and CVP to maintain water deliveries for agricultural and urban uses.

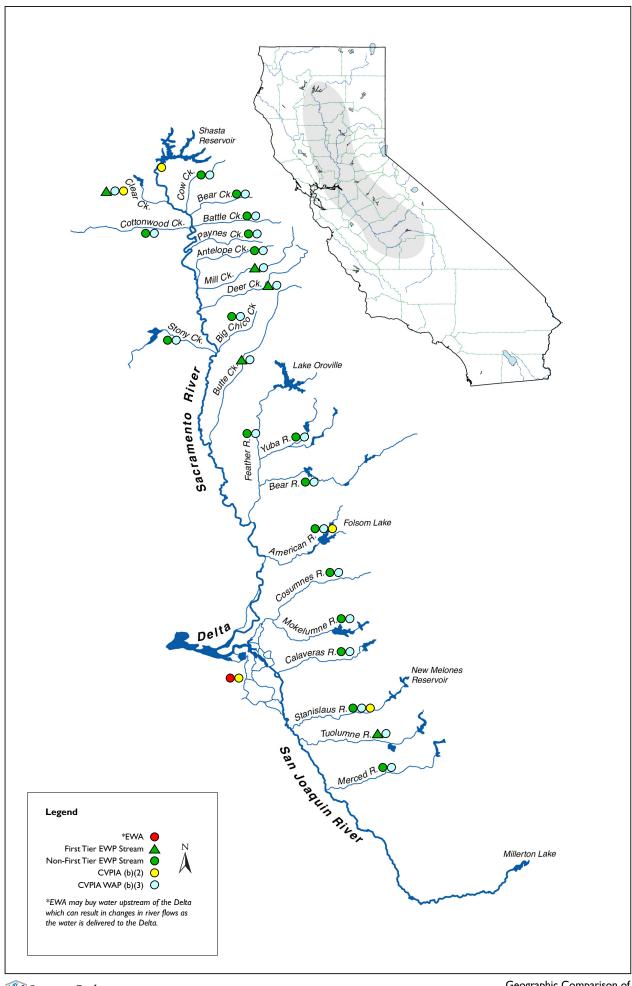
The EWA is based on the belief that flexible management of water will achieve fishery and ecosystem benefits more efficiently than a completely prescriptive regulatory approach. An essential goal of the EWA is to provide increased water supply reliability to SWP and CVP contractors while ensuring the availability of sufficient water to meet fishery protection and the restoration/recovery needs outlined as part of the overall CALFED Ecosystem Restoration Program (ERP). In return, the state and federal fisheries management agencies provide assurances of compliance with the federal and State Endangered Species Acts (ESAs) for the first four years of Stage 1 implementation.

# **Program Description**

To protect fish, the Project Agencies (U.S. Department of the Interior, Bureau of Reclamation [USBR] and California Department of Water Resources [DWR]) acquire alternative sources of project water supply called EWA assets, including money, water, and rights to storage and conveyance. The Management Agencies (U.S. Fish and Wildlife Service [USFWS], National Oceanic and Atmospheric Administration [NOAA] Fisheries, and California Department of Fish and Game [DFG]) manage these assets to augment instream flows and Delta outflows, modify CVP and SWP exports to benefit fisheries, and replace the regular project water supply reduced by the changes in CVP and SWP operations. In essence, the acquired water assets (and the water accumulated by the EWA through temporary relaxation of Delta export rules) are supplied to CVP and SWP export contractors to offset export pumping reductions directed by the Management Agencies to protect fish. Thus, the export reductions are undertaken without additional cost to the exporters.

The EWA can use the following four tools to acquire and use alternative sources of water supply:

 Water Acquisitions. Using EWA funds, the agencies acquire EWA assets from willing sellers both upstream of the Bay-Delta and from project export service areas. Purchases may include leases, options, long-term agreements, storage space, or any other types of



transactions that make alternative project water supplies available. Water may be made available through direct purchase of water or through the management of Delta operations, including: the sharing of CVPIA Section 3406 (b)(2) and ERP water pumped by the SWP; the joint point of diversion agreement between the SWP and CVP for wheeling EWA water; SWP appropriation of unregulated flow; and project pumping made possible by the relaxation of regulatory requirements.

- Banking of EWA Assets. Acquired water may be stored in reservoirs upstream of the Bay-Delta, in San Luis Reservoir, or in groundwater basins north and south of the Delta. The banking of EWA assets also may be used to facilitate "source-shifting" agreements.
- **Borrowing.** Water in San Luis Reservoir may be borrowed to enhance the effectiveness and use of EWA assets.
- Transfers and Delta Conveyance. Water assets acquired upstream of the Bay-Delta may be transferred to create EWA assets in the export service areas.

# **Timeframe for Implementation**

According to the EWA Operating Principles Agreement, the EWA will expire on September 30, 2004. However, it is anticipated that sufficient assets, either from existing sources or from supply augmentation, will be available for the protection of fish beyond the first four years and that the commitment will be extended to the remaining three years of Stage 1. However, this extension will require a review of the programmatic biological opinion that contains the original regulatory commitment.

# CENTRAL VALLEY PROJECT IMPROVEMENT ACT DEDICATED CVP YIELD PROGRAM ([b][2]) AND WATER ACQUISITION PROGRAM ([b][3])

#### **Purpose**

The CVPIA authorized the Secretary of the Interior through USFWS and USBR to develop a program to double the natural production of anadromous fish in Central Valley streams and provided a number of tools to assist these agencies in achieving that goal, including two water management tools discussed below.

# **Program Description**

The U.S. Department of the Interior (Interior) created the Anadromous Fish Restoration Program (AFRP) to develop and implement the CVPIA. The USFWS developed the Final Restoration Plan for the AFRP (Restoration Plan) (January 2001), which focuses on long-term, sustainable restoration of the natural production of anadromous fish in Central Valley rivers and streams and includes instream flow priorities for various Central Valley rivers and streams.

The tools provided by the CVPIA to assist in restoring anadromous fisheries include reoperation of the CVP (under Section 3406[b][1]), dedication of 800,000 acre-feet of CVP yield for fish and wildlife (under Section 3406[b][2] of the CVPIA), and the acquisition of water from willing sellers (under Section 3406[b][3]) to augment instream flows in Central Valley rivers and streams to benefit anadromous fish, and to provide water supplies for State and federal wildlife refuges and the Grasslands Resource Conservation District (under Section 3406[d] of the CVPIA). Interior established the WAP under the authority of Section 3406(b)(3) to acquire water for these two purposes. This effort is being undertaken cooperatively by USBR and USFWS, with the USFWS responsible for determining water needs and USBR responsible for acquiring the water.

# **Dedicated CVP Yield Program**

Section 3406(b)(2) of the CVPIA states, in part, "The Secretary...is...authorized and directed to...dedicate and manage annually 800,000 acre-feet of Central Valley Project yield for the primary purpose of implementing fish, wildlife, and habitat restoration purposes and measures authorized by this title...".

In 1994 Interior issued draft guidelines on how it intended to manage the water dedicated under Section 3406(b)(2). Considerable debate and legal challenges have accompanied Interior's efforts to formulate final guidelines since 1994. On December 18, 2002, following a court opinion, Interior issued draft guidelines for public review.

Despite the controversy regarding the various methods proposed by Interior to measure and manage the 800,000 acre-feet, Interior has been dedicating yield under Section 3406(b)(2) since 1993 to improve instream and Delta conditions for anadromous fish, primarily salmon and steelhead. Actions taken by Interior have included: increasing releases from CVP reservoirs, curtailing Delta exports, and closing the Delta Cross Channel gates to protect migrating fish in the Sacramento River.

# **CVPIA Water Acquisition Program**

The following briefly describes the two subprograms that fall under the umbrella of the WAP: instream AFRP acquisitions and refuge water supply acquisitions.

Acquisitions for Instream Flows. Planning for long-term water acquisitions in support of the Restoration Plan is in its initial stages. Studies are being conducted to determine the priorities for water acquisitions based on three factors: biological needs, the hydrologic characteristics (including operations) of streams, and economic considerations. These three factors will determine priorities for the location and timing of acquisitions and for the amount of water acquired.

**Acquisitions for Refuges.** Section 3406(d) of the CVPIA requires Interior to provide water to Central Valley State and federal wildlife refuges to achieve optimum wetland management. These wildlife refuges are identified in Table 2. The amount of water to be supplied to these refuges is the amount defined as "Level 4" in the "Dependable Water Supply Needs" table in the 1989 *Refuge Water Supply Report*. Some water supply needs are also defined in the *San Joaquin Basin Action Plan/Kesterson Mitigation Action Plan Report*.

Table 2. State and Federal Wildlife Refuges and Management Areas

Sacramento Valley Refuges	San Joaquin Valley Refuges
Sacramento National Wildlife Refuge	San Luis National Wildlife Refuge
Delevan National Wildlife Refuge	Kesterson National Wildlife Refuge
Colusa National Wildlife Refuge	Volta Wildlife Management Area
Sutter National Wildlife Refuge	Los Banos Wildlife Management Area
Gray Lodge Wildlife Management Area	San Joaquin Basin Action Lands
	Freitas
	West Gallo
	Salt Slough
	China Island
	East Gallo
	Grasslands Resource Conservation District
	Mendota National Wildlife Refuge
	Merced National Wildlife Refuge
	Kern National Wildlife Refuge
	Pixley National Wildlife Refuge

# **Program Restrictions or Limitations**

# **Dedicated CVP Yield Program**

Water managed under the Dedicated CVP Yield Program is limited to CVP-controlled streams and the Delta. Actions can therefore be taken on the upper Sacramento River (releases from

Shasta Dam), Clear Creek (releases from Clair Engle Lake), American River (releases from Folsom Dam), Stanislaus River (releases from New Melones Reservoir), and the Delta (restrictions on CVP exports at the Tracy Pumping Plant). In any water year, the total amount of water managed under this program is limited to 800,000 acre-feet.

# **Water Acquisition Program**

Water acquired through the WAP must be from willing sellers and must not create an involuntary reallocation of CVP yield.

# **Timeframe for Implementation**

# **Dedicated CVP Yield Program**

Interior has been managing water under the Dedicated Yield Program since 1993, though the manner in which the 800,000 acre-feet is managed has changed and is subject to change in the future. This program has no ending date.

# **Water Acquisition Program**

USBR has completed short-term acquisitions to supplement instream flows and for refuge water since passage of the CVPIA. Currently, USBR and USFWS are developing a long-term implementation plan for both the instream and refuge elements of the WAP. Final development of the WAP is expected to take 2–3 years (U.S. Fish and Wildlife Service and U.S. Bureau of Reclamation 2000). In the interim, USBR will continue to acquire water for both the instream and refuge program elements while developing the long-term acquisition plan.

#### **DWR DRY-YEAR PROGRAM**

Over the past 10 years, DWR has initiated a number of dry-year (or drought) water acquisition programs. These short-term programs have all been designed for fast implementation in response to SWP contractor needs during dry or critically dry periods. DWR operated drought programs in 1991, 1993, and 1994, and a dry-year program in 2001.

# **Timeframe for Implementation**

Dry-year or drought programs are developed as the need arises. Typically, these short-term programs are planned and implemented in a single water year.

#### WATER USE EFFICIENCY PROGRAM

The goals of the WUE Program are to:

- reduce water demand through "real water" conservation,
- improve water quality by altering volume, concentration, timing, and location of return flows, and
- improve ecosystem health by increasing instream flows where necessary to achieve targeted benefits.

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The WUE Program awards grants to water conservation programs that have the potential to reduce the amount of water diverted along selected river reaches. The geographic scope of the WUE Program encompasses the entire CALFED solution area.

# **Timeframe for Implementation**

The WUE Program awarded its first grants in 2001, and will be active throughout the 30-year CALFED implementation period.

#### STORAGE PROGRAM

The Storage Program is attempting to increase the amount of water available to the system through the funding of efforts to increase groundwater and surface water storage opportunities and local conjunctive use programs. The geographic scope of the Storage Program encompasses the entire CALFED solution area.

# **Timeframe for Implementation**

The Storage Program awarded its first grants in 2001 and will be active throughout the 30-year CALFED implementation period.

# SACRAMENTO VALLEY AGREEMENT INTEGRATED WATER MANAGEMENT PROGRAM (PHASE 8)

The SWRCB has been engaged in proceedings to determine the responsibility to meet water quality standards in the Sacramento–San Joaquin Delta. The SWRCB has completed phases 1 through 7 of Decision 1641 and has recently been focused on Phase 8, which involves the Sacramento River and its tributaries. During Phase 8 proceedings, DWR and the USBR, as operators of the State and federal export projects, respectively, have claimed that certain water right holders in the Sacramento Valley must cease diversions or release water from storage to help meet water quality standards in the Delta. Sacramento Valley water users have claimed that their water use has not contributed to any water quality problems in the Delta, and, as senior water right holders and water users within the watershed and counties of origin, they are not responsible for meeting these standards.

Rather than continue what had become highly adversarial proceedings, Sacramento Valley water users, DWR, USBR, and export water users agreed to defer these Phase 8 proceedings and instead continue using a cooperative approach. This approach focuses on meeting water supply, water quality, and environmental needs in areas of origin and throughout California. The result of this cooperative effort was an agreement titled *Agreement Regarding Resolution of Phase 8 Issues, Development and Management of Water Supplies, and a Binding Commitment to Proceed Pursuant to Specified Terms*; this agreement is commonly known as the Sacramento Valley Agreement. This agreement is intended in part to develop local resources beyond what is needed by local interests, which could result in water being made available for transfer.

#### COORDINATION WITH RELATED PROGRAMS

Coordination between the EWP and related programs will occur because of overlapping staff among the programs, coordination built into the process, and use of common "rules" for acquiring water.

# **Commonality of Staff**

The EWP involves acquiring water for environmental purposes under direction by the ERP Implementing Agencies:

- USFWS,
- NOAA Fisheries, and
- DFG.

These three agencies, as well as USBR and DWR, are also the implementing agencies for the EWA. These five agencies meet weekly as the EWA Team (EWAT) to plan for and coordinate both export reduction actions and water acquisitions. The same staff members from USFWS responsible for the EWA are also responsible for the EWP as well as the Section 3406 (b)(2) and (b)(3) programs. In addition, members of the EWAT representing DWR also have responsibilities for acquiring water for the Dry Year Program. This overlap of staff between the programs makes coordination nearly automatic.

#### **Coordination Built into the Process**

The process developed by the EWP for acquiring water includes steps during the evaluation of all proposals for review by related programs, including those listed at the beginning of this paper. These reviews are intended to alert these other programs to where the EWP desires to acquire water so they can evaluate any impacts on their programs and identify any opportunities for partnerships.

In addition, EWP staff members have been meeting informally with staff members representing other CALFED programs that may provide some synergy or opportunity for partnership. These have included the Watershed Program and the WUE Program. In addition, EWP staff are coordinating with staff from the Environmental Justice Program to ensure that the EWP is implemented consistently with the environmental justice commitments contained in the CALFED Programmatic ROD.

# **Use of Common "Rules" for Acquiring Water**

DWR has developed a series of papers intended to provide guidance to willing sellers of water regarding what DWR considers "real" water, the preferred ways for making water available to DWR, and preferred strategies for conducting environmental compliance and mitigating impacts of water transfers. This guidance pertains to both the EWA and the Dry Year Program. The ERP Implementing Agencies have prepared the EWP Conceptual Proposal Guidance Document to describe the requirements of the program to those preparing proposals. This guide incorporates all relevant sections of the guidance provided by DWR. This will ensure consistency among the EWP,

EWA, and Dry Year Program and avoid competition between the programs for buyers who may otherwise prefer one program over another based on their requirements.

# **Opportunities for Partnerships**

In addition to ensuring that there is coordination between the EWP and related programs, consideration has been given to determining where opportunities for partnerships between these programs may exist. A few examples follow.

# **Shared Cost Acquisitions**

There may be water acquisitions that would be of interest to the EWP and to another program or programs. Under those circumstances, funds from each program could be shared to reduce the cost of the acquisition to each. For instance, the EWP and the CVPIA WAP ([b][3]) program may both want to acquire water on the same stream, as their goals are very similar. Water may also be acquired by the EWP and the EWA, with the water used instream by the EWP and in the Delta by the EWA. While the EWA attempts to have acquired water released on a fish-friendly schedule, the EWP may contribute funds toward an acquisition to alter the timing of release to be even more ecologically friendly. A contribution by the EWP would be appropriate only when the timing of releases desired by the EWP created an increased risk to the EWA that they would not be able to export that water from the Delta. Similar partnerships may be possible with the Dry Year Program.

# **Experiments with Water Provided through Dedicated Yield**

There may also be circumstances where the EWP and the Dedicated CVP Yield Program could work together to make flows available for an experiment. This would have to occur on a CVP-controlled stream. Because Clear Creek is a first priority stream for the EWP, and because the CVP controls to a large extent the flows in Clear Creek, the EWP could work with the Dedicated CVP Yield Program to design a flow-related experiment on Clear Creek where the water would be supplied through dedication by Interior, and the experimental design, monitoring, and analysis would be conducted and paid for by the EWP.

# **Experiments with Water Provided through Water Use Efficiency**

Partnerships between the EWP and the WUE Program may also be possible. The EWP is working with the WUE Program to coordinate their efforts and to identify any potential partnerships. If the WUE Program funds a water use efficiency effort on a high-priority EWP stream, the water for the EWP experiment could be provided, at least in part, through water conservation. Similar to

experiments through dedicated yield, for experiments through water use efficiency, the EWP would conduct and pay for the experimental design, monitoring, and analysis. This would have the added benefit of benefiting two CALFED programs through one grant.

# **Experiments with Water Provided through Increased Storage**

Projects to increase surface or groundwater storage capacity that are paid for with public funds will dedicate some of the additional water created by this new storage to the environment. Water dedicated to the environment could be used either by the EWA or by the EWP. If dedicated to the EWP, this water could be sold or traded to provide money or water on EWP high-priority streams to conduct experiments.

The Integrated Water Management Program could result in new water being developed in the Sacramento Valley. If any new water results from facilities paid for in part using CALFED funds, some of that water could become available to the EWP. While this water may not be on streams where increased flows are desired, it could be sold and the money used to acquire water on EWP priority streams or exchanged for water on high priority streams. Any new water developed using non-CALFED funds could increase the amount of water available for acquisition from willing sellers. Therefore, the EWP will work with the parties preparing the Integrated Water Management Program to ensure that EWP needs are considered during planning for and construction of any new storage projects. The EWP will also work with these parties during preparation of concept proposals to solicit feedback and comments on potential water purchases.

#### **CONCLUSION**

Coordination of the EWP and the related water acquisition programs could provide several advantages to each program. Where there are opportunities for partnership between the two programs, both programs could gain the advantages of a single purchase at a reduced price, and with reduced administrative costs. Further, these partnerships would advance the CALFED goal of providing multiple benefits and would foster the perception among stakeholders that CALFED was actively pursuing opportunities to meet its goals in an efficient manner.